43.(New)   The memory of claim 42, further having a third reference level intermediate between the first and second reference levels, wherein the identifying comprises identifying a memory cell of the set having a charge above the third reference level and below the second reference level.

44.(New)   The memory of claim 43, further having a fourth reference level intermediate between the second and third reference levels, wherein the identifying comprises identifying a memory cell of the set having a charge above the third reference level and below the fourth reference level.

45.(New)   The memory of claim 42, wherein the rewriting comprises determining the respective data value to rewrite into the data cell using error correction code.--

REMARKS

These remarks are in response to the to the Official Action mailed on July 2, 2001. These claims had previously been indicated as allowable in the previous Office Action of August 15, 2000, that suspended prosecution due to the request for declaration of an interference. The present Office Action rejected claims 37 and 39-41 under 35 U.S.C., first paragraph. For the reasons given below, it respectfully submitted the present application provides support for the pending claims and that the rejection is consequently not well founded. Additionally, several new claims have been added.

More specifically, the present Office Action states that it fails to find support for the last clause of claim 37, namely

> programming the memory cell until the charge of the memory cell is above the programmed-cell reference level.

The following discussion provides an expanded version of the support previously provided in the Request for Declaration of Interference, where the "programming the memory cell..." is identified with step 905 of Figure 9 of the present application. As noted in the support provided in this Request for the earlier parts of this claim, the "programmed cell reference voltage" can be identified as V_{PV} (or alternately V_{PRH} or V_{SH} depending on the embodiment) in the present application.

Step 905 is part of the "scrub" operation described with respect to Figure 9 between page 24, line 24, and page 26, line 3. Specifically, step is described on page 25, lines 18-22:

> ...a rewrite operation 905 will be performed thereon to reprogram the sector(s). The steps of this program operation follows the procedure set forth in Fig. 8.

Figure 8 is described between page 23, line 6, and page 24, line23. The program verify process is composed of steps 801-803 of Figure 8.

The program verify process of steps 801-803 is described between page 23, line 10, and page 24, line 4:

> In step 801, the memory cells are programmed. ... Upon termination of the programming step 801, a program verify operation 802 is initiated. In the program verify operation 802, the cells are read with a voltage V_{PV} applied to their control gates. A check is then performed to see if all the cells are written correctly under such control gate voltage. ... If the data are read correctly, as shown in step 803, even with V_{PV} applied at the control gate, a program verify 802 operation is considered to have been successfully.

That the read value of a floating gate memory cell is indicative of the charge of the memory cell is described, for example, beginning on page 2, line 17, of the application, as well as in the various other patents and applications incorporated by reference in the present application, and is standard in the operation of such cells.

Newly added independent claim 42 is also drawn to the method of Figure 9 of the present application. Dependent claims 43 and 44 concern using a "scrub high" and a "scrub low" voltage that lie within the verify voltages, as is shown in Figure 10. Claim 45 concerns the use of error correction code (ECC) in the rewrite process.

Thus, it is respectfully submitted that support is supplied for "programming the memory cell until the charge of the memory cell is above the programmed-cell reference level." Therefore, it is respectfully submitted that the present application fully supports the claimed subject matter, that a rejection under 35 U.S.C., first paragraph, is not well founded, and that claims 37 and 39-41 are allowable. Reconsideration of the Office Action's rejection of claims 37 and 39-41, and consideration of new claims 42-45 and a prompt declaration of the previously requested interference is respectfully requested. In the meantime, however, if

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the Exminer has any questions about this request, application, or response, a telephone call to the undersigned is invited.

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Respectfully submitted,

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